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Utah Watershed Review

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Utah's Nonpoint-Source Water-Quality Newsletter

February 1999

Utah's Draft CAFO Strategy Under Review

By Jack Wilbur
Editor, Utah Watershed Review

Quickly on the heels of the joint national draft strategy on concentrated animal feeding operations (CAFOs), released late last year by USDA and EPA, the Utah CAFO committee has released a draft strategy that is tailored to animal operations in our state.

"A State of Utah strategy is important to determine what approach is best for the agencies and producers in Utah to take to deal with this issue," according to an introductory statement in the strategy. The statement goes on to say that a federal strategy is important and will be useful in Utah, "but we also realize that Utah is unique in many respects and that the stakeholders in Utah need to deal with animal waste problems in ways and within time frames that are most appropriate here."

The stated goal of the Utah strategy is to "restore and protect the quality of our water for its beneficial uses, maintain a viable and sustainable agricultural industry and to keep the decision making process on these issues at the state and local level."

The strategy is divided into seven areas:

- Information, education and training, and research and demonstrations;
- Prioritization of impaired watersheds, impaired by pollutants associated with animal waste;
- Inventory of AFOs within those priority areas;
- Assessment of AFO/CAFOs to determine which may be a source of pollution and designated and potential CAFOs under the federal Clean Water Act;
- Compliance schedules and/or permits for those which are an actual potential source of pollution to prepare and implement a Comprehensive Nutrient Management Plan (CNMP);
- Monitoring;
- Schedules and milestones.

One of the first new educational outputs specifically for animal operations is a guide for livestock waste management, which is being produced by the Utah Department of Agriculture and Food. Work on the publication will begin this spring. The new guide should be available

by the end of the year.

The Utah strategy does not mention any other outreach outputs specifically, but it does discuss that types of information that need to get to the agricultural community. These categories of information include:

- definitions of CAFO/AFO and CNMP;
- current and proposed regulatory requirements;
- Inventory of AFOs within those priority areas;
- methods to implement a CNMP and properly control animal wastes;
- time frames available to solve problems;
- funding sources and availability of technical assistance;
- highlight good examples;
- overall program/strategy goals and expectations.

The strategy calls for the information and education efforts to be cooperative and should include the involved governmental agencies as well as commodity groups to facilitate the flow of information.

The strategy asserts the importance of prioritizing watersheds due to limited resources. The state's 303 (d) list and the Unified Watershed Assessment should be the beginning point to identify watersheds with significant problems, as well as data from other agencies indicating areas that should be high priority for initial action.

The strategy suggests that inventory of Utah's animal operations should begin with the largest operations, those with 1,000 animal units or more. Within the geographic areas that are identified initially as high priority, an inventory of significant AFOs should be conducted. After all operations of 1,000 animal units or more have been inventoried in a priority area, the focus will switch to those operations with more than 300 animal units and then those that may otherwise be considered significant polluters. After the assessments have been completed in the high priority areas as identified in the 303(d) list, the inventory will continue in other areas of the state.

See "CAFO" on page 2

Legacy Highway Plans may not get Federal Okay

EPA and the Army Corps. of Engineers must consider potential impacts to wetlands when considering the Legacy Highway proposal.

The State of Utah and the federal government seem to be at an impasse over the proposed Legacy Highway project in Davis County. At stake are hundreds of acres of prime wetlands, increased development and revenue for several small communities in the county, and the future of transportation in a narrow corridor of our state.

The problem is that the option preferred by most of the local governmental bodies and business leaders in the area is more damaging to wetlands than at least one other alternative. Utah Governor Michael O. Leavitt and the Utah Department of Transportation are backing the locally preferred alternative. On the other side of the issue is the U.S. Environmental Protection Agency (EPA). In the middle between the state and EPA sits the Army Corps of Engineers, the agency that must approve any disturbance to wetlands.

While the Army Corps cannot officially comment on the proposal until the final Environmental Impact Statement is released later this year, the indication is that the Army will not be able to approve the locally preferred option because it causes greater environmental impact than does at least one of the other options that have been proposed.

Compromise might be the best way to get the highway built, but compromise will mean that Leavitt will have to ask Davis County leaders to agree to an alignment of the highway that cuts into

their space for growth.

"We still believe we have a 50-50 shot of getting it (the locally preferred alternative) approved," said Byron Parker, Utah Department of Transportation (UDOT).

At the same time, however, UDOT has retained Peggy Strand, Washington environmental attorney, through the Utah Attorney General's Office. The hiring has some speculating that the state is preparing to press its case in court if federal agencies block the highway. Officially, UDOT says that Strand is on board to help the environmental study address environmental laws.

The highway is the first link in a projected 120-mile alternative to I-15 from Brigham City to Nephi. The southern Davis segment would cost \$374 million, including land acquisition the state

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Christensen Leaves Water Quality Div.

James G. Christensen, a longtime participant in the Utah Nonpoint Source program at the state level, has left his position with the Utah Division of Water Quality to become manager of the Bear River Water Conservancy District.

Jim worked for the Utah Division of Water Quality (DWQ) for five and a half years. During that time he provided outstanding leadership in developing and implementing the ‘Watershed Approach’ to water quality management in Utah. Prior to work with DWQ, Jim served 10 years as the director of the Division of Conservation and Development for the Utah Department of Agriculture. During his time with agriculture, Jim worked intensively with soil conservation districts across Utah to strengthen their role in local natural resource planning. Earlier in his career Jim worked as a water resources planner for the Utah Division of Water Resources.

The Utah Nonpoint Source Task Force wishes Jim well in his new position and wishes to thank him for several years of hard work toward controlling nonpoint source water pollution in Utah.

USEE Earth Day Festivities Set

The Utah Society for Environmental Education is again planning to celebrate Earth Day at Gardner Village. Once again the day will include exhibits, environmental games, music, drawings, food and giveaways.

This year’s theme is, Celebrate the Earth: Learn How to Reduce your Personal Impact. For more information on the event or to sign up as an exhibitor or volunteer, contact Jeff Sprague, 801 359-1549. His e-mail address is jsprague@sisna.com.

Utah AWRA Conference Set for April 29 in SLC

The American Water Resources Association, Utah Section will hold its annual conference on April 29, 1999 at the Cavanaugh Olympia Hotel in Salt Lake City.

The theme of this year’s conference is: Water and Quality of Life for Y2K and Beyond.

Sessions will include water quality, federal regulations, meeting future needs and open space vs development.

For more information about the conference, please call Craig Miller, Utah Division of Water Resources, 538-7270

"CAFO"

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If two watersheds a year are inventoried, it would take 5 years to complete the work. According to the national strategy the work should be completed in a much shorter period of time, perhaps two years. All of the partnering agencies will work closely together and diligently to complete the inventory as quickly as possible.

After the inventory is prepared, inspections of all inventoried facilities that may be significant sources of pollution should be scheduled and conducted.

All large CAFOs, those with 1,000 animal units or more, will be issued a general pollution discharge permit. Smaller operations that are a potential significant source of pollution may also be added to the permit.

Immediate compliance and/or enforcement action may be necessary when severe pollution problems exist anywhere in the state. Such action would be especially warranted where there have been problems over a long period of time or where there has been a failure to utilize assistance from available programs.

The monitoring program will consist of self-monitoring for individual or general permits, follow-up inspections on some regular schedule to insure that the CNMP is being followed, and record keeping.

The Utah strategy will be phased in starting with the beginning of outreach programs in early 1999. By June of 2000, the state will complete prioritizing watersheds. Inventory of larger CAFOs is scheduled to be complete by September of 2000, just three months after the completion of the inventory of the highest priority watersheds. That same month inspection of CAFOs within the highest priority watersheds should begin. The first round of inspections should be complete by the end of the year 2000.

Overall, the Utah strategy coordinates well with the national joint strategy. The few differences in permitting and compliance schedules are minor. The biggest difference in the Utah strategy is the ambitious education program. Since Utah has relatively few large CAFOs, education and awareness is important. Commodity groups, farm associations and government agencies will have convince operators that writing and implementing a nutrient management plan and practices is in their best interest.

UDOT Looking for Davis Co. Commuting Answers for Future Growth

While commuters in Salt Lake County struggle daily with construction woes while I-15 is widened and rebuilt, transportation planners are scrambling to figure out ways to handle increasing traffic demands through the narrow north-south corridor through Davis County.

Despite probable rejection of the proposed Legacy Highway through Davis County by EPA and the Army Corps. of Engineers, the Utah Department of Transportation continues to use the proposed road as a cornerstone to its future traffic management between Salt Lake City and Ogden. Other possible solutions to traffic congestion include widening I-15 and developing better mass transit.

Once it is widened, I-15 through Davis County would look very much like I-15 through Salt Lake City will look in the next couple of years. It will consist of a 10-lane road, including two high occupancy vehicle (HOV) lanes. There will be an exclusive HOV connection to downtown Salt Lake City. There will also be two system-to-system interchanges, one for I-215 and one for the Legacy Highway (if approved).

Impacts to the reconstruction will include moving 18 homes and seven businesses. Approximately 24 acres of wetlands will be disturbed. The total cost of the project will be \$914,000,000.

Even with all of the I-15 improvements, UDOT estimates that it won’t come close to handling all of the estimated 120 percent increase in traffic through the area between now and the year 2020.

According to Byron Parker, UDOT

engineer, the Legacy Parkway project will more than makeup the carrying capacity need of the area through 2020. Parker is quick to point out that only 160 acres of wetlands will be disturbed and that the state will buy land for a parkway that will include constructed wetlands. He also indicated that the cost, \$337 million, is less than the cost of widening I-15.

Look for the Legacy Highway to continue to be an issue throughout this year.

"Legacy"

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is offering for a nature preserve.

Davis County cities remain entrenched in their opposition to letting the highway encroach on their industrial fringes, though the governor apparently asked local officials if they would be willing to bend. However, published reports indicate that local leaders believe that they have already compromised.

Meanwhile the legislature is moving \$20 million originally budgeted for the Legacy project and allocating it toward widening I-15 through Davis County.

House Speaker Marty Stephens said that the funding transfer does not mean that the legislature is giving up on the Legacy Highway. If Legacy gets approved, he maintained, then I-15 money would probably be transferred to Legacy.

If EPA and Army approval are not given, the state may seek a political solution or compromise. Until that time, UDOT plans to continue to push the locally preferred alternative.

Utah Watershed Review

EditorJack Wilbur

Editorial Review

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If you would like to request an additional copy, make a comment or suggest a story or watershed focus idea, please call **Jack Wilbur** (801) 538-7098. Or write:

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Envision Utah Wants to Know How You Want to Grow

Utah continues to grow at a very fast rate. Its an issue that is on the minds of many Utahns and always high on the agenda at the Governor’s office. Enter the Envision Utah campaign.

About two years ago, the Governor organized a Utah Growth Summit that was televised live from a local high school. This year a supplement newspaper section was produced and distributed in the state’s major newspapers. the section included a description of four possible growth scenerios and a survey asking residents to rank their preferred choices for growth.

Each scenario is broken down into the same categories:

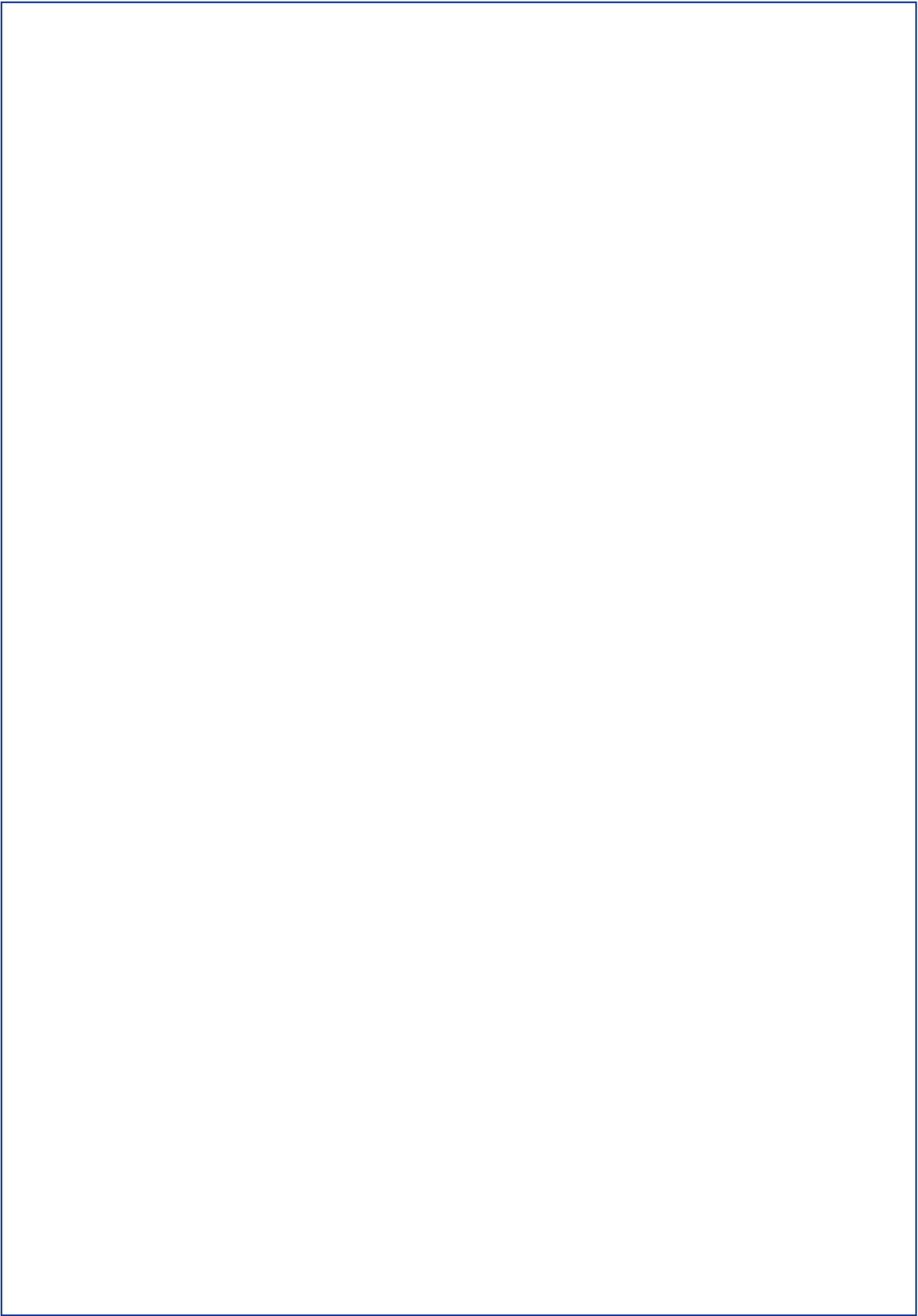
- Transportation choices
- Infrastructure cost 1998-2020
- Air Quality
- Total Water Demand
- Walkable Communities
- Average size of single family lot
- Percentage of single family homes vs. condos, townhomes, apts, etc.
- amount of new land consumed 1998-2020
- Agricultural land consumed 1998-2020

As you might guess, each scenario has a different look, financial cost and environmental cost attached to it. Scenario A, for example has the highest road costs, the fewest mass tranist choices, the worst air quality, the largest single family home lot sizes, the fewest walkable communities, the most urban sprawl, etc. It also requires the fewest compromises and lifestyle adjustments.

Scenario C, on the other hand, offers the best air quality and the lowest infrastructure cost, but mass transportation options including light rail are part of the equation, lot size is smaller and there are more condos and apartments in the mixture.

While the survey and concurrent town meetings were promoted in January, Envision Utah is more than justone promotion. Envision Utah is a non-partisan, communitypartnership working to help residents of the Greater Wasatch area form a long-term vision that will preserve Utah’s high quality of life for future generations. Governor Michael O. Leavitt and Larry H. Miller serve as honorary co-chairs of the effort. Envision Utah is sponsored by the Coalition for Utah’s Future, a privately-funded, non-profit organization.

Envision Utah does not advocate any particular growth strategy, but is an advocate for making smart decisions now that may help us avoid possible long-term pitfalls and preserve the things we value most about living in Utah.



After a significant amount of public feedback from area residents indicating their preferences for future growth, the Envision Utah committee will work to see that the preferred vision is enacted.

Envision Utah organizers know that they can't necessarily stop or even slow growth. The goal is to direct growth in the most desirable path. For more information about the Envi-

sion Utah program or to fill out a survey, visit the web site on the internet at envisinutah.org.

Unique New 'Catalyst' Program Spotlights Coordination



San Pete Academy students conduct water quality experiments as part of two-day Catalyst training in January

Imagine combining environmental education and stewardship with drug addition awareness, and leadership and communication skills in one training. That’s the unique concept behind a new effort spearheaded by the Utah Federation for Youth and the Utah Adopt-A-Waterbody program.

Recently in Ephram, Utah, a two-day pilot course was held with about 40 behavior disordered and at-risk high school-aged youth at Sanpete Academy, an alternate school for the two Sanpete County school districts.

The two-day session started with addition awareness. Kari Cutler, Utah Federation for Youth lead a discussion about the effects of drugs on your brain. She also shared her own heartfelt story of living with an alcoholic/addict husband. She shared the pain his additions caused himself, the rest of his family and his friends. But it is not clear whether the message got through to this group of troubled young people, most of whom smoke and many of whom use alcohol or other illegal drugs regularly.

After lunch the students were bussed to Palisades Reservoir where they completed environmental assessment sheets. Some of the information the young people were asked to provide included a description of the weather and surroundings. They were also asked to draw a picture of the water body.

The next morning the students tested the water gathered from Palisades Reservoir, Gunnison Reservoir and the tap at their school.

Jack Wilbur, Utah Department of Agriculture and Food, and Charlie Eubank, an intern with the Utah Federation for Youth, conducted the water testing exercises. The students divided into groups of about four or five people to use the eight water test kits that were

available. For some of these young people it appeared to be the first scientific exercise they had participated in a long time.

Eubank read the instructions for each step of each test. Each group conducted the same three tests: nitrate, phosphorus and dissolved oxygen. While the test results probably wouldn’t stand up to scientific scrutiny, volunteer water quality monitoring provides students and community groups with a better connection to and appreciation for science.

Though many of these teenagers have little interest in school, most of them seemed to enjoy the field trip to the reservoir and the water chemistry activities. A follow-up exercise including physical and biological measurements of a near by water body will take place this spring when the weather is a bit more friendly.

Following the water testing, the youth took the Gemstones personality assessment activity. During this short journey of self discovery, they each got to answer questions about themselves and how they act. Are they spontaneous or thoughtful, independent or always concerned about the opinions of others? Most of the students said they had fun learning more about themselves.

The lighter hearted spirit of the morning gave way to an afternoon of Essential Peacemaking (EP), an exercise designed to look at gender bias and look at how men and women perceive themselves and others.

Sara Eubank, executive director, Utah Federation for Youth, explained the origins of EP. Several years ago a husband-wife peace negotiating team, Danon Perry and Jeroline Brussio, were called to Belfast, Northern Ireland, to work with several local couples, some Protestant and some Catholic. Danon and Jeroline were late arriving in Belfast.

When they arrived at the meeting hall, the participants were almost ready to come to blows. There was so much hostility and animosity that the only thing the couple could think to do to diffuse the situation was for Danon to take the men into one room and Jeroline to take the women into another room. Once the genders were separated, Danon asked the men what it was like to be a man in Belfast at that time. Likewise, Jeroline asked the women what it was like to be a woman in Northern Ireland at that time.

The answers they got were astonishing. The men, both catholic and protestant, said that they fight because they believe that their women want them to defend the honor of their religion and their heritage. The women from both religions said that they don’t want the men to fight. They said that the most important thing to them was to have their husbands, fathers and sons by their sides instead of dead and buried in the ground.

That day of honesty and discovery help plant a small seed of peace in that war ravished city. Before the couple left, another remarkable event took place that helped plant the seed of an activity called Peace trees that has now taken place in more than 25 countries.

Shortly after the essential peacemaking

session, a young neighborhood catholic boy went outside and started on his own to clean up an abandoned lot in the burned-out area. Soon another young boy, this one a protestant boy, started to help. Soon, most of the adults who had taken part in EP were working shoulder to shoulder to restore a small part of their environment.

Since then, Peace trees events have become opportunities for young people 14-24 years old to learn peace making and leadership skills, while working together on an environmental restoration project somewhere in the host city.

Last summer the Utah Federation for Youth hosted the first Peace trees Salt Lake City event. About 25 teenagers from throughout Utah as well as California, Washington and Alaska, live at Camp Williams for 18 days and worked on a stretch of the Jordan River just north of Raging Waters water park at about 1700 S.

The 1999 Peace trees Salt Lake City event is scheduled to run for nine days in late June.

For more information about Peace trees, essential peacemaking, or any of the activities of the Utah Federation for Youth, please contact Kari Cutler, 538-4266, or visit them on the web at www.ufyi.org.



This student 'reaches for a natural high' with the Utah National Guard's climbing wall

TMDL Brochure Now Available



The cover page of the brochure features a photograph taken during the spring in the Chalk Creek watershed near Coalville, Utah. The photo was taken above Huff Creek, a tributary to Chalk Creek. Fencing, vegetation planting, in-stream stabilization and irrigation water management are among the practices that have been used by the Chalk Creek watershed committee.

Editor's Note:
Due to the great response for copies of this brochure, we are again running this advertisement, first seen in the December 1998 issue of Utah Watershed Review. The brochure is available free of charge in small or large quantities.

"Total Maximum Daily Loads: Understanding the TMDL Process" is a new brochure that is now available from the Utah Department of Agriculture and Food.

EPA sponsored the project that highlights nonpoint source TMDL success stories from three Western states. The brochure also attempts to make understandable the TMDL process.

The TMDL process is explained in simple terms. The publication discusses requirements for TMDLs in the Clean Water Act, defines TMDLs and covers three representative case examples.

Firesteel Creek in South Dakota, Deep Creek in Montana and Chalk Creek in Utah are spotlighted as positive examples of locally led conversation and watershed restoration programs that make good TMDLs.

To receive one or multiple copies of the brochure, please contact Jack Wilbur at the Utah Department of Agriculture and Food at the address listed below. You may also reach Jack via the telephone at 801 538-7098, or at E-mail address: agmain.jwilbur@email.state.ut.us

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Looking at Utah's 303(d) List

Backyard Conservation Guide Available

Editor's Note: *This is the first part of a year-long look at the rivers, streams, lakes, and reservoirs throughout Utah that do not meet their designated beneficial uses.*

Criteria for listing water bodies on the 303(d) list

The federal Clean Water Act (CWA) establishes a national goal of "fishable, swimmable" waters.

There are still waters in Utah that do not meet this goal, despite the fact that many pollution source have implemented required levels of control technology through the Utah Pollution Discharge Elimination System (UPDES) and nonpoint source pollution control efforts.

The Utah Division of Water Quality determines which waters of the state are not meeting the Beneficial Use Classification of the state water quality standards and includes these waters on a 303(d) list.

Once on this list, the TMDL process is initiated to take actions needed to restore a water body through removing excess pollutant loadings by determining the sources and implementing controls so that the water body meets water quality standards.

Utah lists all waterbodies on the 303(d) list in which a Utah Pollution Discharge Elimination System Discharge Permit renewal is required during the current 303(d) cycle (April 1, 1998 - March 31, 2000). Any waterbody assessed as partially supporting or not supporting its beneficial uses are listed. The exception to that practice are the waterbodies for which a Total Maximum Daily Load (TMDL) has been completed and approved by EPA.

The list below and to the right is part one of the list of lakes and reservoirs identified as needing Total Maximum Daily Load Analyses.

The table included in the issue of Utah Watershed Review includes Utah Lake Drainage lakes and reservoirs, Weber River Drainage lakes and reservoirs and Rush Lake, which is its own entity within the Great Salt Lake Basin.

In future issues of this publication, the lakes and reservoirs in other watersheds and drainages will be listed, and eventually, the streams and rivers on the list will be displayed by watershed.

For further information about the 303(d) list, please contact Tom Toole, 801/538-6859.

The list can also be accessed via the internet at: <http://www.deq.state.ut.us/dwq-home.ssi>.

An interesting and informative new booklet from the USDA Natural Resources Conservation Service (NRCS) points out the links between on-farm conservation practices and backyard conservation practices.

Backyard Conservation: Bringing Conservation from the Countryside to the Backyard, is a colorful guide to gardening that focusses on conservation practices like those used for years on many farms and ranches throughout the country. A total of 10 conservation practices are highlighted in the book.

The backyard guide looks at tree planting, wildlife habitat, backyard ponds, backyard wetlands, composting, mulching, nutrient management, terracing, water conservation, and pest management.

Filled with step-by-step instructions and rich, vivid full-color phtographs, the backyard conservation guide can be a useful resource for backyard nature lovers. Whether the guide will give urban gardners a new-found or heightened appreciation for farming remains to be seen.

The Backyard Conservation guide is a cooperative project of the USDA Natural Resources Conservation Service, the National Association of Conservation Districts, and the Wildlife Habitat Council. To receive a complimentary copy of the Backyard Conservation guide, call 1 888 LAND CARE.



Water Users Meetings Set for March in St. George

It's time again for the annual Utah Water Users Workshop in St. George, Utah. This year's meetings will be March 9-10, 1999.

Below is a listing of sessions and events scheduled for this year.

One of the highlights of the meetings is an update from Bill Yellowtail, Region

VIII administrator from EPA on Clean Water Act implementation and compliance issues.

The other two general sessions also promise to be informative and interesting. Ron Thompson, Washington County Water Conservancy District, will discuss Washington County's water con-

servation/development plan. Tom Donnelly, executive vice president, National Water Resources Association, will discuss national water resources issues.

Topics offered during concurrent sessions include artificial recharge of aquifers, ground water contamination and clean up, and an update of state and

national issues related to concentrated animal feeding operations.

The cost of the workshop is \$55.00. For more information, contact Peggy Shumway or Robert Hill 435 797-2802 or 435 797-2791.

Water Quality Board Approves Composting Facility Study

The Utah Water Quality Board voted unanimously in February to allow the Division of Water Quality (DWQ) to fund a feasibility study for a proposed regional agricultural animal waste composting facility in the Cache Valley.

Shelly Quick, an environmental scientist with the division presented the idea to the board, saying that there isn't currently enough data to show whether the proposed \$1 million facility would work in the valley.

The Blacksmith Fork Soil Conservation District will conduct the \$56,000 study to answer several feasibility questions.

Some of the very questions the study is designed to answer were posed by concerned board members. Rob Adams, from Southern Utah, asked about hauling the waste from individual farms to the regional facility over increasing busy roads. Growth in Cache Valley gets far less attention than it does in St. George, Park City, and the Wasatch Front, yet the entire valley is growing rapidly. Quiet country roads where slower moving, aromatic waste trucks or farm machinery can go at their own pace without causing problems are becoming a thing of the past in Cache Valley.

Nan Bunker, a board member from the central part of the state wondered why no private company has stepped forward to build and operate a regional composting facility like the one that exists in the Delta area. Doug Cone, a conservation district employee, answered that the Blacksmith Fork District has been waiting patiently for a company to come forward. The district board and the Water Quality Board hope that this study will show that there is enough of a market to begin a viable commercial enterprise.

According to Cone, the growers of 5,000 acres of organically grown wheat in Box Elder County have expressed an interest in all of the compost the facility would be able to produce for the first several years.

The results of the feasibility study will be available later this year.

